



**US Army Corps
of Engineers®**
Rock Island District

Ecosystem Restoration and Flood Damage Reduction Services



JULY 2003

RESPECTED • RESPONSIVE • RELIABLE

Table of Contents

Introducing the Corps of Engineers	2
Ecosystem Restoration Services.....	4
Introduction to Ecosystem Restoration	5
Study Process, Project Implementation, and Local Cooperation	6
General Investigations Studies for the Environment	9
Continuing Authorities Program; Ecosystem Restoration	10
Section 1135 Project Modification for Improvements to the Environment	11
Section 204 Beneficial Use of Dredged Materials	12
Section 206 Aquatic Ecosystem Restoration	13
Flood Damage Reduction Services	15
Introduction to Flood Damage Reduction Services	16
Study Process, Project Implementation, and Local Cooperation	17
Specifically Authorized Flood Damage Reduction Projects	20
Continuing Authorities Program; Flood Damage Reduction	21
Section 205 Small Projects	22
Section 14 Emergency Streambank and Shoreline Protection	23
Section 208 Clearing and Snagging of Waterways	24
Planning Assistance to States	25
Planning Assistance to States	26
Flood Plain Management Services.....	27
Flood Plain Management Services	28
Emergency Readiness and Response.....	30
Emergency Readiness and Response	31
Sample Request Letter.....	33
Sample Request Letter	34
Sample Projects	35
Additional Missions.....	42
Additional Missions	43
Navigation	43
Regulation	43
Land Management.....	44
Other Engineering Services.....	44
Recreation	44

Introducing the Corps of Engineers



**US Army Corps
of Engineers** ®
Rock Island District

You might think of the U.S. Army Corps of Engineers (Corps) when you see locks and dams on the Mississippi River. But we also want you to think of us when you see the wetlands, the islands, and all of the fish and wildlife that flourish on the Upper Mississippi River. Did you know that the Corps manages the Upper Mississippi River System - Environmental Management Program, which focuses on habitat rehabilitation and enhancement projects, such as island creation and wetland enhancement, as well as long-term resource monitoring?

The Corps is the Nation's oldest and largest water resources development agency. Congress assigned the Corps this civil works responsibility in an effort to conserve the Nation's most vital natural resources.

The Corps began its water resources program in 1824 when Congress for the first time appropriated money for improving river navigation. Since then, the Corps has been involved in improving recreation and commercial navigation, reducing flood damage, and controlling beach erosion. Along with these missions, the Corps generates hydropower, supplies water to cities and industry, regulates development in navigable waters, and manages a recreation program. The main mission areas of the Corps are:

- Navigation
- Flood Damage Reduction
- Ecosystem Restoration
- Emergency Response
- Regulation

The following pages provide information on the services that the Corps can provide your organization. Our services range from large congressionally authorized flood protection and ecosystem projects to smaller ecosystem studies and flood damage reduction projects.

If you are looking for a partnering agency to help you with a water and land related resources study or project, call our office or send a letter to the address below. In your letter, please describe the water and related land resources issues you have and the type of assistance you need.

Contact us at:

District Engineer
U.S. Army Engineer District, Rock Island
ATTN: Project Management Branch
Clock Tower Building - P.O. Box 2004
Rock Island, Illinois 61204-2004

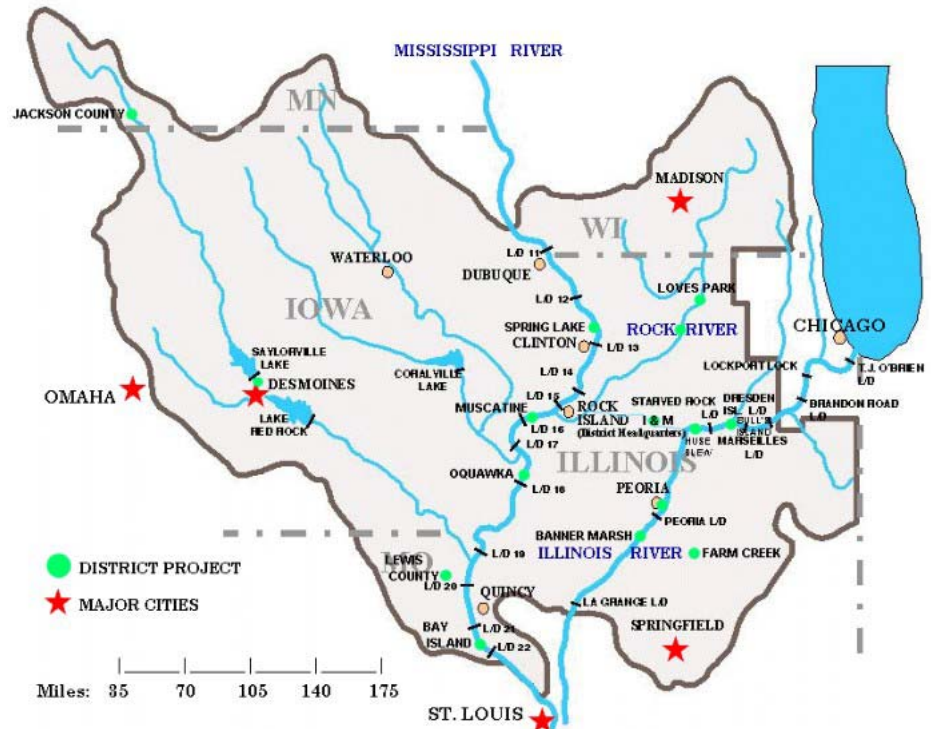
Or via email at:

CustomerOutreach@mvr02.usace.army.mil
309/794-5923

The Rock Island District is one of six districts that make up the Mississippi Valley Division. Our district covers more than 78,000 square miles and includes 314 miles of the Mississippi River from Guttenberg, Iowa, to Saverton, Missouri, and 268 miles of the Illinois Waterway from Lake Street in downtown Chicago to the La Grange Lock and Dam, southwest of Beardstown, Illinois.

While some Corps districts have both military construction and civil works missions, we are primarily a civil works district administering Federal water resources development programs in large portions of Iowa and Illinois and smaller portions of Wisconsin, Minnesota, and Missouri. We also maintain the capability to support the military construction program when necessary.

We have a diverse staff that includes both advisory and administrative personnel who manage district operations, and a technical staff comprised of specialists and technicians representing a variety of scientific and professional fields. About half of our staff works at the headquarters on Arsenal Island, while the other half works at construction field offices, lock and dam sites, and flood control reservoirs.



At the Rock Island District we pledge to:

- Provide our services to the Nation in times of emergency.
- Plan, design, and construct water resources and infrastructure projects.
- Manage and conserve natural resources consistent with ecosystem management principles while providing quality outdoor recreation experiences.
- Operate and maintain lands and facilities under our jurisdiction.
- Implement regulatory authorities that protect our Nation's resources.

Section

1

Ecosystem Restoration Services

Introduction to Ecosystem Restoration

Ecosystem Restoration:

Ecosystem restoration activities examine the condition of existing ecosystems and determine the feasibility of restoring degraded ecosystem structure, function, and dynamic processes to a less degraded, natural condition. The Corps' ecosystem restoration program provides a more comprehensive approach for addressing the problems associated with disturbed and degraded ecological resources.

Corps activities in ecosystem restoration concentrate on engineering solutions to water and land related resource problems. The principal focus is on those ecological resources and processes that are directly associated with the hydrological regime of the ecosystem and watershed.

What the Corps Can Do:

The Corps has been authorized by the Congress of the United States to perform ecosystem restoration in conjunction with water resource and related land resource issues. These services can be performed under two different types of authorities—General Investigations and Continuing Authorities Program. Each of the programs requires a study process and a cost-share sponsor prior to implementation of a project.

General Investigations Studies for the Environment (Section 306 of Water Resources Development Act of 1990): This authority is used for larger projects that require specific authorization and appropriation of funds through the Congress. Typical projects include investigation and restoration of watersheds and river basins. Currently, the Rock Island District is working on the Illinois River Basin Ecosystem Restoration, Peoria Riverfront Development, Rock River Ecosystem Restoration, and the Upper Mississippi River System - Environmental Management Program. These types of projects may identify smaller projects that can be completed under the Continuing Authorities Program.

Continuing Authorities Program: This program allows the Corps to plan, design, and construct smaller projects without direct authorization from the Congress. The potential cost-share sponsor must request the Corps to investigate potential water or land related resource issues that might fit the program. Once the Corps determines that the project fits the program, the District will request funds from the Mississippi Valley Division to initiate a short reconnaissance effort to determine Federal interest in proceeding with the project. There are three authorities available for this program:

1. Section 1135 Project Modifications for Improvements to the Environment. Section 1135 of the 1986 Water Resources Development Act.
2. Section 204 Beneficial Use of Dredged Materials. Section 204 of the 1992 Water Resources Development Act.
3. Section 206 Aquatic Ecosystem Restoration. Section 206 of the 1996 Water Resources Development Act.

Detailed descriptions of each of the programs are shown later in this document.

Study Process, Project Implementation, and Local Cooperation

Study Process:

Before the Federal Government can participate in implementing a project, planning studies must be conducted to determine if the project is justified. Planning studies are typically conducted in two phases — the reconnaissance and the feasibility. A description of these phases is as follows:

Reconnaissance Phase:

The reconnaissance phase is fully funded by the Federal Government (limited to \$100,000) and is usually completed in less than 12 months. The purposes of the reconnaissance phase are to:

1. Define the problems and opportunities and identify potential solutions;
2. Determine whether or not planning should proceed into the feasibility phase based on a preliminary assessment of the Federal interest, costs, benefits, and environmental impacts of the identified alternatives;
3. Estimate the cost of the feasibility phase; and,
4. Assess the support of the local interests for continuing into feasibility and eventual implementation of a project.

The reconnaissance phase is completed upon the signing of a Feasibility Cost Sharing Agreement (FCSA) by the Corps and the local sponsor. The feasibility study cannot be initiated until the FCSA is signed.

Feasibility Phase:

The feasibility phase optimizes the plan or plans to be built and can take up to 3 years to complete. The feasibility phase is cost shared equally between the Corps and the non-Federal sponsor. The non-Federal share of feasibility phase costs may be a combination of cash and in-kind products or services.

The feasibility report results in a recommendation to Congress for or against Federal participation in solutions to the water resources problems and opportunities identified in the study. The project must meet the requirements outlined in “Economic and Environmental Principles and Guidelines for Water and Related Land Resource Implementation Studies.” The objective of the Corps in project planning is to contribute to national economic development consistent with protecting the Nation’s environment, pursuant to national environmental statutes, applicable executive orders, and other Federal planning requirements. A recommendation for Federal participation would precede a recommendation for construction authorization.

Project Implementation and Local Cooperation:

Following authorization for construction of a project, the sponsor is required to enter into a Project Cooperation Agreement to define the responsibilities of each party. The sponsor must normally agree to the following:

1. Provide without cost to the United States all Lands, Easements, Rights-of-way, Relocations, and Disposal areas (LERRDs) necessary for the construction and subsequent maintenance of the project;
2. Provide without cost to the United States all necessary alterations of buildings, utilities, highways, bridges, sewers, and related and special facilities;
3. Hold and save the United States free from damages due to the construction and subsequent maintenance of the project, except damages due to the fault or negligence of the United States or its contractors;
4. Maintain and operate the project after completion without cost to the United States;
5. Prevent future encroachment, which might interfere with proper functioning of the project;
6. Assume responsibility for all costs in excess of applicable Federal cost limitations;
7. Provide guidance and leadership in preventing unwise future development of the flood plain by use of appropriate flood plain management techniques to reduce flood losses; and,
8. If the value of the sponsor's contribution above does not equal or exceed 35 percent of the project cost, provide a cash contribution to make the sponsor's total contribution equal to 35 percent.

General Investigations

General Investigations Studies for the Environment

Section 306 of the Water Resources Development Act of 1990

What the Corps Can Do:

The types of studies and/or projects are tailored to be site specific. The Corps oversees planning, engineering, and construction of ecosystem restoration in close coordination with the local sponsor.

Types of Studies and Projects:

The types of studies and/or projects can be actions that restore the environment. Environmental restoration is defined as the process of rehabilitating and repairing degraded ecosystems. The purpose of environmental restoration is to “improve the condition of a disturbed ecosystem, including its plant and animal communities, or portions thereof, to some prior ecological condition.” Projects are cost shared on a case-by-case basis, depending upon real estate acquisition, but generally are 65-percent Federal and 35-percent non-Federal. An example of projects includes the following: environmental restoration actions, along with other Corps Missions (Flood Control, Navigation, etc.); wetland creation and management structures; fish bypass facilities; water control management facilities; fish and wildlife habitat construction; and aquatic habitat construction.

Authority and Scope:

Section 306 of Water Resources Development Act of 1990 states that environmental restoration is one of the primary missions of the Corps. As such, the Corps may undertake studies and build projects for environmental restoration and for water and related land resources problems and opportunities in response to directives, called authorizations, from the Congress. Congressional authorizations are contained in public laws, and in resolutions of either the House Public Works and Transportation Committee or the Senate Environment and Public Works Committee. The focus of the studies is on determining whether a Federal project responding to the problems and opportunities of concern should be recommended, within the general bounds of congressional interest, in authorizing Federal participation in water resources development. **This includes Section 216 studies that allow the Corps the authority to look at opportunities for environmental restoration at existing and operating Corps projects, such as navigation and/or flood control projects.**

Study Process:

Before the Federal Government can participate in implementing an ecosystem restoration project, planning studies must be conducted to determine if the project benefits exceed the costs. Planning studies are typically conducted in two phases — the reconnaissance and the feasibility.

Project Implementation and Local Cooperation:

Following authorization for construction of a project, the sponsor is required to enter into a Project Cooperation Agreement to define the responsibilities of each party.

How to Request Assistance:

General Investigation Studies/Projects requests should be directed to Mr. Brad Thompson by telephoning 309/794-5256, or by writing to the address shown on page 2.

Continuing Authorities Program; Ecosystem Restoration

Section 1135 Project Modification for Improvements to the Environment

Section 1135 of the 1986 Water Resources Development Act



Authority and Scope:

Section 1135 of the 1986 Water Resources Development Act, as amended, provides authority for the Corps to determine the need for project modifications in the structures and operations of Corps projects for improving the environment in the public interest. Measures at other locations that have been affected by the construction or operation of the project can be undertaken, if such measures do not conflict with the authorized project purposes.

What the Corps Can Do:

The Corps can assist in the restoration of degraded ecosystems through the modification of Corps structures, operations, or implementation of measures in affected areas.

Responsibility of Local Sponsor:

Formal assurance of local cooperation in the form of a Project Cooperation Agreement must be executed with the local sponsor. In addition, the local sponsor must normally agree to the following:

1. Provide without cost to the United States all Lands, Easements, Rights-of-way, Relocations, and Disposal areas (LERRDs) necessary for the construction and subsequent maintenance of the project;
2. Maintain and operate the project after completion without cost to the United States;
3. Assume responsibility for all costs in excess of the Federal cost limitation of \$5 million;
4. “Work-in-kind” or contributions from the sponsor may be negotiated; and,
5. If the value of the sponsor’s contribution above does not equal or exceed 25 percent of the project cost, provide a cash contribution to make the sponsor’s total contribution equal to 25 percent.

Charges for Assistance:

The sponsor must contribute 25 percent of the total project implementation cost as cash or Lands, Easements, Rights-of-way, Relocations, and Disposal areas (LERRDs). If the value of the LERRDs plus the cash contribution does not equal or exceed 25 percent of the project cost, the sponsor must pay the additional amount necessary so that the sponsor’s total contribution equals 25 percent of the project cost.

How to Request Assistance:

An environmental improvement project under Section 1135 can be initiated upon receipt of a request from a prospective local sponsor. Section 1135 project requests should be directed to Ms. Dorene Bollman by telephoning 309/794-5590, or by writing to the address shown on page 2.

Section 204 Beneficial Use of Dredged Materials

Section 204 of the 1992 Water Resources Development Act



Authority and Scope:

Section 204 of the 1992 Water Resources Development Act, as amended, provides authority for the Corps to restore, protect, and create aquatic and wetland habitats in connection with construction or maintenance dredging of an authorized project.

What the Corps Can Do:

The Corps can create aquatic and wetland habitats in connection with construction or maintenance dredging of an authorized project.

Responsibility of Local Sponsor:

Formal assurance of local cooperation must be furnished by a local sponsoring agency. In addition, the local sponsor must normally agree to the following:

1. Provide without cost to the United States all Lands, Easements, Rights-of-way, Relocations, and Disposal areas (LERRDs) necessary for the construction and subsequent maintenance of the project;
2. Maintain and operate the project after completion without cost to the United States; and,
3. Assume responsibility for all costs in excess of the Federal cost limitation of \$5 million.

Charges for Assistance:

The sponsor must contribute 25 percent of the total project modification cost above the base plan, including the provision of all LERRDs. If the value of the LERRDs plus the cash contribution does not equal or exceed 25 percent of the project cost, the sponsor must pay the additional amount necessary so that the sponsor's total contribution equals 25 percent of the project cost. No work-in-kind is allowed.

How to Request Assistance:

Investigations of an environmental improvement project under Section 204 can be initiated upon receipt of a request from a prospective sponsoring agency. Section 204 project requests should be directed to Ms. Dorene Bollman by telephoning 309/794-5590, or by writing to the address shown on page 2.

Section 206 Aquatic Ecosystem Restoration

Section 206 of the 1996 Water Resources Development Act



AUTHORITY AND SCOPE

Section 206 of the 1996 Water Resources Development Act, as amended, provides authority for the Secretary of the Army to carry out an aquatic ecosystem restoration and protection project. Such projects will usually include manipulation of the hydrology in and along bodies of water, including wetlands and riparian areas. A project is adopted for construction only after a detailed investigation determines that the project will improve the quality of the environment and is in the best interest of the public, and clearly shows the engineering feasibility and economic justification of the improvement. Each project is limited to a Federal cost share of not more than \$5 million. The Federal limitation includes all project-related costs for feasibility studies, planning, engineering, construction, and supervision and administration.

What the Corps Can Do:

The Corps can carry out aquatic ecosystem restoration and protection projects. Such projects generally include manipulation of the hydrology in and along bodies of water, including wetlands and riparian areas. A project is adopted for construction only after a detailed investigation determines that the project will improve the quality of the environment and is in the best interest of the public.

Responsibility of Local Sponsor:

Formal assurance of local cooperation in the form of a Project Cooperation Agreement must be executed with the local sponsoring agency. The sponsoring agency just normally agree to the following:

1. Provide without cost to the United States all Lands, Easements, Rights-of-way, Relocations, and Disposal areas (LERRDs) necessary for the construction and subsequent maintenance of the project;
2. Provide without cost to the United States all necessary alterations of buildings, utilities, highways, bridges, sewers, and related and special facilities;
3. Hold and save the United States free from damages due to the construction and subsequent maintenance of the project, except damages due to the fault or negligence of the United States or its contractors;
4. Maintain and operate the project after completion without cost to the United States;
5. Prevent future encroachment, which might interfere with proper functioning of the project;
6. Assume responsibility for all costs in excess of the Federal cost limitation of \$5 million; and,
7. Provide guidance and leadership in preventing unwise future development of the flood plain by use of appropriate flood plain management techniques to reduce flood losses.

Charges for Assistance:

If the value of the LERRDs plus the cash contribution does not equal or exceed 35 percent of the project cost, the sponsor must pay the additional amount necessary so that the sponsor's total contribution equals 35 percent of the project cost. The entire non-Federal share of the total project cost may be credited work-in-kind. Post-feasibility phase design, including plans and specifications, provision of materials, and project construction are items eligible for work-in-kind as part of the non-Federal sponsor's share.

How to Request Assistance:

The Corps can initiate an investigation of a prospective project upon receipt of a request from a sponsoring agency fully empowered under state law to provide the required local cooperation (see sample letter request). Section 206 project requests should be directed to Ms. Dorene Bollman by telephoning 309/794-5590, or by writing to the address shown on page 2.

Section

2

Flood Damage Reduction Services

Introduction to Flood Damage Reduction Services

Flood Damage Reduction:

Federal interest in flood damage reduction began in the early nineteenth century in the Mississippi River Basin when interrelationships between navigation and flood damage reduction became apparent. As the Nation developed, disastrous floods endangered life and property, as well as transportation. In the Flood Control Act of 1936, Congress extended Federal interest in flood damage reduction to the entire Nation.

While the efforts of Federal, State, Tribal, and local interests to reduce flood damages have been substantial and effective, flooding still accounts for 90 percent of all natural disaster damage. It forces several hundred thousand people to be evacuated from homes and work places every year. The purpose of flood damage reduction works is to prevent or reduce flood damages.

Flood damage reduction is accomplished using either structural or non-structural means or a combination of the two.

Structural Measures: Structural flood damage reduction measures include dams and reservoirs, channel modifications, levees, or flood walls.

Non-Structural Measures: Non-structural measures include modifying homes, businesses, and other facilities to reduce flood damages by elevating the structure or removing them from the flood plain. Remaining land can be used for ecosystem restoration, outdoor recreation, or natural open space. Flood warning systems are also considered non-structural measures.

What the Corps Can Do:

The Corps has been authorized by the Congress of the United States to perform flood damage reduction. These services can be performed under two different types of authorities — specifically authorized Flood Damage Reduction Projects and the Continuing Authorities Program. Each of the authorities requires a study process and a cost share sponsor before implementation of a project.

Specifically Authorized Flood Damage Reduction Projects: With specific congressional authorization, the Corps is allowed to develop flood damage reduction projects. This authority is used for larger projects that require authorization and appropriation of funds through the Congress. Typical projects include dams, flood control structures, channel modifications, and levees.

Continuing Authorities Program: This program allows the Corps to plan, design, and construct smaller projects without direct authorization from Congress. The potential sponsor must request the Corps to investigate potential flood damage reduction issues that might fit the program. Once the Corps determines that the project fits the program, the District will request funds from the Mississippi Valley Division to initiate a short reconnaissance effort to determine Federal interest in proceeding with the project. There are three authorities available for this program:

1. Section 205 Small Projects. Section 205 of the 1948 Flood Control Act.
2. Section 14 Emergency Streambank and Shoreline Protection. Section 14 of the 1946 Flood Control Act.
3. Section 208 Clearing and Snagging of Waterways. Section 208 of the 1954 Flood Control Act.

Detailed descriptions of each of the programs are shown later in this document.

Study Process, Project Implementation, and Local Cooperation

NOTE: This process only applies to specifically authorized Flood Damage Reduction Projects and Section 205 Small Projects.

Study Process:

Before the Federal Government can participate in implementing a flood damage reduction project, a planning study must be conducted to determine if the project is economically justified (benefits exceed the costs), technically feasible, and environmentally acceptable. Planning studies are typically conducted in two phases — the reconnaissance and the feasibility.

Reconnaissance Phase:

The reconnaissance phase is fully funded by the Federal Government (limited to \$100,000) and is usually completed in less than 12 months. The purposes of the reconnaissance phase are to: (1) define the problems and opportunities and identify potential solutions; (2) determine whether or not planning should proceed into the feasibility phase based on a preliminary assessment of the Federal interest, costs, benefits, and environmental impacts of the identified alternatives; (3) estimate the cost of the feasibility phase; and (4) assess the support of the local interests for continuing into feasibility and eventual implementation of a project.

The reconnaissance phase is completed upon the signing of a Feasibility Cost Sharing Agreement (FCSA) by the Corps of and the local sponsor. The feasibility study cannot be initiated until the FCSA is signed.

Feasibility Phase:

The feasibility phase optimizes the plan or plans to be built and typically takes 18 months to 3 years to complete. The feasibility phase is cost shared equally between the Corps and the non-Federal sponsor. The non-Federal share of feasibility phase costs may be a combination of cash and in-kind products or services.

The feasibility report results in a recommendation for or against Federal participation in solutions to the water resource problems and opportunities identified in the study. The project must meet the requirements outlined in “Economic and Environmental Principles and Guidelines for Water and Related Land Resource Implementation Studies.” The objective of the Corps in project planning is to contribute to national economic development consistent with protecting the Nation’s environment, pursuant to national environmental statutes, applicable executive orders, and other Federal planning requirements. A recommendation for Federal participation may be made if the feasibility phase finds that the project is economically justified (benefits exceed the costs), technically feasible, and environmentally acceptable. A project recommended for implementation can be submitted to Congress for authorization. Certain small flood damage reduction projects do not require a specific project authorization, but can be constructed under the Continuing Authorities Program.

Project Implementation and Local Cooperation:

Prior to implementation of a project, the sponsor is required to enter into a Project Cooperation Agreement to define the responsibilities of each party. The sponsor must normally agree to the following:

1. Provide without cost to the United States all Lands, Easements, Rights-of-way, Relocations, and Disposal areas (LERRDs) necessary for the construction and subsequent operation and maintenance of the project;
2. Provide without cost to the United States all necessary alterations of buildings, utilities, highways, bridges, sewers, and related and special facilities;
3. Hold and save the United States free from damages due to the construction and subsequent maintenance of the project, except damages due to the fault or negligence of the United States or its contractors;
4. Maintain and operate the project after completion without cost to the United States;
5. Prevent future encroachment, which might interfere with proper functioning of the project for flood control;
6. Assume responsibility for all costs in excess of applicable Federal cost limitations;
7. Provide guidance and leadership in preventing unwise future development of the flood plain by use of appropriate flood plain management techniques to reduce flood losses;
8. Provide a minimum cash contribution of 5 percent of the project cost; and,
9. If the value of the sponsor's contribution above does not equal or exceed 35 percent of the project cost, provide a cash contribution to make the sponsor's total contribution equal to 35 percent.

**Specifically Authorized
Flood Damage Reduction Projects**

Specifically Authorized Flood Damage Reduction Projects

What the Corps Can Do:

Studies and/or projects are tailored to be site specific. The Corps oversees planning, design, and construction of flood damage reduction projects in close coordination with the local sponsor.

Study Process:

Before the Federal Government can participate in implementing a flood damage reduction project, a planning study must be conducted to determine if the project is economically justified (benefits exceed the costs) technically feasible and environmentally acceptable. Planning studies are typically conducted in two phases — the reconnaissance and the feasibility.

Authority and Scope:

Flood damage reduction is one of the primary missions of the Corps. As such, the Corps may undertake studies and build projects to reduce and/or minimize flood damages. The Corps may investigate flooding problems and opportunities in response to directives, called authorizations, from the Congress. Congressional authorizations are contained in public laws and in resolutions of either the House Public Works and Transportation Committee or the Senate Environment and Public Works Committee.

Studies of small projects for specific purposes may be conducted under one of the “Continuing Authorities.” All other studies require a specific authorization from the Congress. The focus of the studies is on determining whether a Federal project, responding to the problems and opportunities of concern, is justified and should be recommended. This recommendation should be within the general boundary of the congressional interest and authorized Federal participation in water resources development. Justification of projects is based on technical, environmental, economic, and social criteria.

Project Authorization:

If a project is recommended for implementation as a result of a feasibility report, it can be submitted to Congress for authorization. Certain small flood damage reduction projects do not require a specific project authorization, but can be constructed under the Continuing Authorities Program.

Project Implementation and Local Cooperation:

Following authorization for construction of a project, the sponsor is required to enter into a Project Cooperation Agreement to define the responsibilities of each party.

How to Request Assistance:

Requests to initiate flood damage reduction studies or questions related to flood damage reduction projects should be directed to Mr. Dennis Hamilton by telephoning 309/794-5634, or by writing to the address shown on page 2.

Continuing Authorities Program; Flood Damage Reduction

Section 205 Small Projects

Section 205 of the 1948 Flood Control Act



Authority and Scope: Section 205 of the 1948 Flood Control Act, as amended, provides a continuing authority for the Corps to develop and construct small flood control projects without the need for specific congressional authorization. A project is recommended for implementation only after a feasibility study clearly shows the engineering feasibility and economic justification of the improvement. Each project is limited to a Federal cost share of not more than \$7 million. This Federal limitation includes all project-related costs for feasibility studies, planning, design, construction, and supervision and administration.

What the Corps Can Do:

The Small Flood Damage Reduction Project program provides for local protection from flooding by the construction or improvement of flood control works. The types of studies and/or projects are tailored to be site specific. Typical flood damage reduction projects may include levees, floodwalls, impoundments, pumping stations, and channel modifications as well as non-structural measures. The Corps oversees planning, design, and construction of flood damage reduction projects in close coordination with the local sponsor.

Study Process:

Before the Federal Government can participate in implementing a flood damage reduction project, a planning study must be conducted to determine if the project is economically justified (benefits exceed the costs), technically feasible, and environmentally acceptable. Planning studies are typically conducted in two phases — the reconnaissance and the feasibility.

Responsibility of Local Sponsor:

Formal assurance of local cooperation in the form of a Project Cooperation Agreement must be executed with the local sponsor. The Corps would oversee project construction; however, once constructed, the maintenance and operation of the project would be the responsibility of the local sponsor.

The sponsor must contribute 35 percent (minimum 5 percent cash) of the total project implementation cost as cash or Lands, Easements, Rights-of-Way, Relocations, and Disposal areas (LERRDs). If the value of the LERRDs plus the cash contribution does not equal or exceed 35 percent of the project cost, the sponsor must pay the additional amount necessary so that the sponsor's total contribution equals 35 percent of the project cost.

How to Request Assistance:

An investigation of a prospective small project under Section 205 can be initiated upon receipt of a request from a sponsoring agency empowered under State law to provide local cooperation. Section 205 project requests should be directed to Mr. Dennis Hamilton by telephoning 309/794-5634, or by writing to the address shown on page 2.

Section 14 Emergency Streambank and Shoreline Protection

Section 14 of the 1946 Flood Control Act



AUTHORITY AND SCOPE

Section 14 of the 1946 Flood Control Act provides a continuing authority for the Corps to develop and construct emergency streambank and shoreline protection projects to prevent erosion damages to endangered highways, highway bridge approaches, public works facilities such as water and sewer lines, churches, public and private non-profit schools and hospitals, and other non-profit public facilities, without the need for specific congressional authorization. A project is recommended for implementation only after a study clearly shows the engineering feasibility and economic justification of the improvement.

What the Corps Can Do:

The Corps is authorized to construct bank protection works to protect endangered highways, highway bridge approaches, and other essential, important public works, such as municipal water supply systems and sewage disposal plants, churches, hospitals, schools, and nonprofit public services and known cultural sites that are endangered by flood-caused bank or shoreline erosion. Privately owned property and facilities are not eligible for protection under this authority.

Study Process:

Planning and design activities are combined into a Planning and Design Analysis (PDA) phase, which is normally limited to 12 months. The first \$40,000 of PDA costs is at Federal expense, and all costs over \$40,000 require a 35-percent local cost share. Each project is limited to a total Federal cost of \$1 million. This Federal limitation includes all project-related costs for planning, design, construction, and supervision and administration.

Responsibility of Local Sponsor:

The sponsor must contribute 35 percent of the total project implementation cost as cash or Lands, Easements, Rights-of-Way, Relocations, and Disposal areas (LERRDs). If the value of the LERRDs plus the cash contribution does not equal or exceed 35 percent of the project cost, the sponsor must pay the additional amount necessary so that the sponsor's total contribution equals 35 percent of the project cost.

How to Request Assistance:

An investigation of a prospective emergency streambank or shoreline protection project under Section 14 can be initiated upon receipt of a request from a sponsoring agency empowered under State law to provide local cooperation. Section 14 project requests should be directed to Mr. Dennis Hamilton by telephoning 309/794-5634, or by writing to the address shown on page 2.

Section 208 Clearing and Snagging of Waterways

Section 208 of the 1954 Flood Control Act



Authority and Scope:

Section 208 of the 1954 Flood Control Act (Public Law 83-780) provides a continuing authority for the Corps to study, develop, and construct in-stream clearing and snagging projects in the interest of flood damage reduction without the need for specific congressional authorization. Work under this authority is limited to clearing and snagging or channel excavation and improvement with limited embankment construction. If investigation indicates that placement of revetment or protection is needed to provide a complete and fully effective project, the sponsor is responsible for the costs of such revetment or protection.

What the Corps Can Do:

In the interest of flood control, the Corps can conduct clearing, snagging, or channel excavation. Limited embankment construction can be provided by utilizing the materials from the cleaning operation.

Study Process:

Planning and design activities are combined into a Planning and Design Analysis (PDA) phase, which is normally limited to 12 months. The first \$40,000 of PDA costs is at Federal expense and all costs over \$40,000 require a 35-percent local cost share. Each project is limited to a total Federal cost of \$500,000. This Federal limitation includes all project-related costs for planning, engineering, construction, and supervision and administration.

Responsibility of Local Sponsor:

If construction of a project is determined to be in the Federal interest, the sponsor must contribute 35 percent of the total project implementation cost as cash or Lands, Easements, Rights-of-Way, Relocations, and Disposal areas (LERRDs). If the value of the LERRDs plus the cash contribution does not equal or exceed 35 percent of the project cost, the sponsor must pay the additional amount necessary so that the sponsor's total contribution equals 35 percent of the project cost.

How to Request Assistance:

An investigation of a prospective clearing and snagging project under Section 208 can be initiated upon receipt of a request from a sponsoring agency empowered under State law to provide local cooperation. Section 208 project requests should be directed to Mr. Dennis Hamilton by telephoning 309/794-5634, or by writing to the address shown on page 2.

Section

3

Planning Assistance to States

Planning Assistance to States

Section 22 of the Water Resources Development Act of 1974



Authority and Scope:

Section 22 of the Water Resources Development Act (WRDA) of 1974, as amended, provides authority for the Corps to assist the states, local governments, and other non-Federal entities in the preparation of comprehensive plans for the development, utilization, and conservation of water and related land resources. Section 208 of WRDA of 1992 amended the WRDA of 1974 to include Native American Tribes.

What the Corps Can Do:

The individual State or Tribe determines the needed planning assistance. Every year, each State and Indian Tribe can provide the Corps its request for studies under the program, and the Corps then accommodates as many studies as possible within the funding allotment. Typical studies are only planning level of detail; they do not include detailed design for project construction. The studies generally involve the analysis of existing data for planning purposes, using standard engineering techniques, although some data collection is often necessary. Most studies become the basis for State or Tribal and local planning decisions.

Funding:

The Planning Assistance to States (PAS) Program is funded annually by Congress. Federal allotments for each State or Tribe from the nationwide appropriation are limited to \$500,000 annually, but typically are much less. Individual studies, of which there may be more than one per State or Tribe per year, generally cost \$25,000 to \$100,000. These studies are cost shared on a 50 percent Federal, 50 percent non-Federal basis.

Typical Studies:

The program can encompass many types of studies dealing with water and related land resource issues. Types of studies conducted in recent years under the program include the following:

Water Supply and Demand Studies	Water Quality Studies
Environmental Conservation Studies	Environmental Restoration Studies
Wetland Evaluation Studies	Dam Safety/Failure Studies
Flood Damage Reduction Studies	Flood Plain Management Studies
Land Use Studies	Master Planning
Brownfields Environmental Assessments	

How to Request Assistance:

Contact the Rock Island District's PAS Coordinator (Mr. Jerry Skalak) by telephoning 309/794-5605, or by writing to the address shown on page 2.

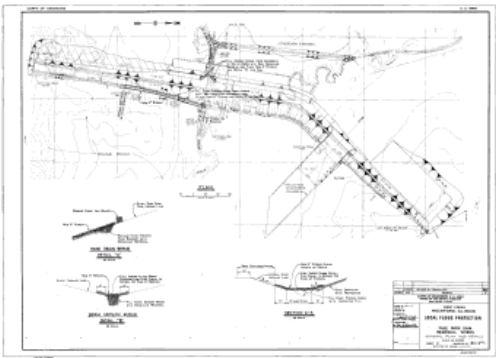
Section

4

Flood Plain Management Services

Flood Plain Management Services

Section 206 of the 1960 Flood Control Act



Authority and Scope:

The program's authority is provided by Section 206 of the Flood Control Act of 1960, as amended. Its objective is to foster public understanding of the options for dealing with flood hazards and to promote prudent use and management of the Nation's flood plains.

Land use adjustments based on proper planning and the employment of techniques for reducing flood damages provide a rational way to balance the advantages and disadvantages of human settlement on flood plains. These adjustments are the key to sound flood plain management.

What the Corps Can Do:

The Flood Plain Management Services (FPMS) Program provides the full range of technical services and planning guidance that is needed to support effective flood plain management.

Types of Assistance:

General Technical Services: The program develops or interprets site-specific data on obstructions to flood flows; flood formation and timing; flood depths or stages; floodwater velocities; and the extent, duration, and frequency of flooding. It also provides information on natural and cultural flood plain resources before and after the use of flood plain management measures.

General Planning Guidance: On a larger scale, the program provides assistance and guidance in the form of "Special Studies" on all aspects of flood plain management planning, including the possible impacts of off-flood plain land use changes on the physical, socio-economic, and environmental conditions of the flood plain.

This can range from helping a community identify present or future flood plain areas and related problems to a broad assessment of the various remedial measures that may be effectively used. Some of the most common types of Special Studies include the following:

- Flood Plain Delineation/Flood Hazard Evaluation Studies
- Dam Break Analysis Studies
- Hurricane Evacuation Studies
- Flood Warning/Preparedness Studies
- Regulatory Floodway Studies
- Comprehensive Flood Plain Management Studies
- Urbanization Impact Studies
- Stormwater Management Studies

The program also provides guidance and assistance for meeting standards of the National Flood Insurance Program and for conducting workshops and seminars on nonstructural flood plain management measures, such as flood proofing and relocation of structures from the flood plain.

Guides, Pamphlets, and Supporting Studies. Studies are conducted under the program to improve the methods and procedures for mitigating flood damages. Guides and pamphlets also are prepared on flood proofing techniques, flood plain regulation, flood plain occupancy, natural flood plain resources, and other related aspects of flood plain management.

Charges for Assistance:

Upon request, program services are provided to state, regional, and local governments, Indian tribes, and other non-Federal public agencies without charge, based on available funding.

Program services also are offered to non-water resource Federal agencies and to the private sector on a 100-percent cost recovery basis. For most of these requests, payment is required before services are provided. A schedule of charges is used to recover the cost of services taking up to one day to provide. Letter requests or signed agreements are used to charge for those that take longer.

All requesters are encouraged to furnish available field survey data, maps, historical flood information, and the like to help reduce the cost of services.

How to Request Assistance:

Agencies, governments, organizations, and individuals interested in flood-related information or assistance should contact the Rock Island District's FPMS Program Coordinator (Mr. Jerry Skalak) by telephoning 309/794-5605, or by writing to the address shown on page 2.

Section

5

Emergency Readiness and Response

Emergency Readiness and Response

Public Law 84-99



Authority and Scope:

Public Law 84-99 provides authority for the Corps to provide immediate and effective response and recovery assistance during emergencies and disasters.

Preparedness Assistance:

The preparedness program allows the Corps to undertake activities necessary to insure that a knowledgeable and experienced work force is always available to respond to natural disasters. The planning aspect includes development of an emergency management organization, planning, training, and maintaining adequate supplies, and an inspection program for Federal and non-Federal flood control structures.

- Participation in emergency seminars and exercises when requested by state or local officials.
- Inspection of flood control works for Public Law 84-99 eligibility, and advisement to local officials of needed maintenance.
- Technical assistance for development of plans at the state and local levels.

Response and Recovery Assistance:

The Corps may provide emergency assistance for flood response and post-flood response activities to save lives and protect improved property (i.e., public facilities/services and residential/commercial developments) during or following a flood or coastal storm. Assistance to individual homeowners and businesses is not permitted. This includes agricultural lands. Emergency Operations assistance will be undertaken to supplement state and local efforts.

Authority to perform post-flood activities immediately after a flood or coastal storm is provided by Public Law 84-99 as amended, along with Public Law 93-288 as administered by the Federal Emergency Management Agency (FEMA). Corps assistance must be required immediately and is limited to major flood or coastal storm disasters resulting in life-threatening or property-damaging situations.

Examples of Response Assistance:

- Assist in search and rescue operations.
- Furnish technical advice and assistance.
- Provide emergency repairs to levees and other flood control projects.
- Furnish materials such as sandbags, polyethylene sheeting, lumber, pumps, or rock for stabilization when the Corps is actively participating in a flood fight.

If the Corps is not actively participating in a flood fight, Government supplies may be furnished only if local resources are exhausted or will be exhausted. Under such circumstances, supplies will be replaced in-kind or paid for by local interests. All unused stock should be returned or reimbursed to the Government at replacement cost.

Examples of Recovery Assistance:

- Furnish technical advice and assistance.
- Provide restoration repairs to eligible flood control projects.
- Clearance of drainage channels, bridge openings, or structures blocked by debris deposited during the event.
- Clearance of blockages of critical water supply intakes and sewer outfalls.
- Debris removal necessary to reopen vital transportation routes.
- Temporary restoration of critical public services or facilities. Identify hazard mitigation opportunities.

How to Request Information:

Contact the Rock Island District's Emergency Management Division by telephoning 309/794-5325 or 309/794-5264, or by writing to the Emergency Management Division at the address below:

District Engineer
U.S. Army Engineer District, Rock Island
ATTN: Emergency Management Division
Clock Tower Building - P.O. Box 2004
Rock Island, Illinois 61204-2004

Section

6

Sample Request Letter

Sample Request Letter

(Date)

District Engineer
U.S. Army Engineer District, Rock Island
ATTN: Project Management Branch
Clock Tower Building
P.O. Box 2004
Rock Island, Illinois 61204-2004

***Note:** This is a sample letter for requesting services for Planning Assistance to States. This letter is provided as a sample only. Before requesting services, contact the person shown under the authority listed or our Customer Outreach Specialist at (309) 794-5923 or via email at customeroutreach@usace.army.mil in order to determine the correct letter format for the requested service.*

Dear Sir or Madam:

This letter is in reference to the U.S. Army Corps of Engineers' _____ Program. We understand that the provisions of Section _____ of the Water Resources Development Act of _____, as amended, provide authority for the Corps of Engineers to assist in the preparation of _____.

The (name of State, Indian Tribe, local government, or other non-Federal entity) requests planning assistance for (briefly describe problem or need, including, if appropriate, the name of the body of water or waterway, and City, and/or County, and State).

We would like to discuss the availability of information, required schedule, and level of effort required in order to negotiate the appropriate Letter of Agreement to initiate a Section _____ study.

Please contact (name, title, phone number) to arrange a further discussion of this inquiry.

Sincerely,

Signature of Cooperating Agency

Section 7	Sample Projects
---------------------	------------------------



**US Army Corps
of Engineers** ®
Rock Island District

Waterloo, Iowa

Planning Assistance to States

In the 1920's, the Corps built a floodwall to protect the City of Waterloo. Since then, a local flood protection project was constructed behind the 1920's floodwall, where the actual levee and flood wall system were completed in the early 1980's and were designed for a 100-year level of flood protection. However, this same flood-wall that protects the City from the ravages of floods also creates a barrier to the water during times of normal flow. While the City is delighted with the protection the floodwall has provided, it would like the community to have better access to the riverfront. The City also wants to examine how, during times of low flow, it could maintain a steadier pool through the Cedar River Corridor to allow community access. Additionally, the City wants to examine the structural integrity of two dams, noting the lower dam is key to maintaining such a pool in the corridor.

Finally, the City would like to determine how the Rath Neighborhood Area could be incorporated in the Riverwalk area. The Rath Neighborhood Area is a designated Environmental Protection Agency (EPA) Brownfields Demonstration Pilot. A Brownfields, as defined by the EPA, is a site, or portion thereof, that has actual or perceived contamination and an active potential for redevelopment or reuse. The City requested the Corps' assistance in identifying potential land uses once it has completed site assessment and remediation.

The Corps developed the following analyses for the City and incorporated them into one report:

Hydraulic/Hydrologic Analysis

The Corps conducted a hydraulic and hydrologic analysis to determine the effects of modifying the area between the 1920's floodwall and the recently built floodwall to accommodate a proposed "Riverwalk" and greenspace. This analysis included considerations for potential pool regulation to promote recreational use of the river, effects of a regulated pool on sedimentation, storm sewer system, floodplain, and dam requirements. A summary of the analysis will be included in the Land Use Plan report.

Structural Analysis

The Corps inspected the existing dam structure to determine its level of structural integrity. A structural stability analysis was done to determine the stability of the structure as it is currently used and with modification to accommodate rise of the pool.



US Army Corps
of Engineers®
Rock Island District

North Fabius River Scotland County, Missouri Section 14 Emergency Streambank and Shoreline Protection



In the 1950's, the North Fabius River channel was straightened north of State Route A so that flows could be directed through the State Route A Bridge at this location (also called Rainbow Bridge). Since that time, meandering processes have reestablished and migration is occurring down valley. In addition, when the North Fabius River meets or exceeds its channel capacity, the river continues to remove the earth embankments upstream of State Route A Highway and Rainbow Bridge. This has caused the loss of approximately 2,340 linear feet of bankline, vegetation, and trees. The channel cross section is changing, thus shifting concentrated flows to the right side of the bridge abutments, threatening the integrity of the bridge structure and roadway embankments. Erosion is caused from high water periods, bank sloughing, over-bank flooding, and runoff. Since the upstream channel was straightened, a comparison of aerial photographs shows a significant difference in conditions upstream of the bridge over time.

The outer bank has eroded to the point that concentrated near-bank currents are misaligned with the opening of the bridge. There is also a large point bar on the right descending bank beginning approximately 10 feet upstream of the bridge. These problems have threatened the viability of the Rainbow Bridge structure and State Route A roadway embankments. The Missouri Department of Transportation reports that State Route A at the Rainbow Bridge has an average daily traffic count of 320 vehicles. Loss of this road and bridge would be a hardship for area residents and would require a 38-mile detour route.

Four alternatives were reviewed, and the following was selected:

Provide streambank protection in two areas upstream of the bridge:

1. In Area 1, excavate approximately 11,000 cubic yards of sand fill from the point bar (shoal); fill and shape existing bankline with riprap on the same reach.
2. Place longitudinal stone fill toe and riprap protection in Area 2 with tiebacks for a distance of approximately 1,000 feet.



US Army Corps
of Engineers®
Rock Island District

Mad Creek, Muscatine, Iowa

Section 205 Flood Damage Reduction



Existing Mad Creek

The Mad Creek watershed drains approximately 17.3 square miles in the eastern portion of the City of Muscatine and areas to the north in Muscatine County. Due to the nature of the watershed and intensive development in the downtown area, Mad Creek is prone to flash flooding, experiencing flooding events in 1991, 1993, and 1998. Alternative plans were developed and evaluated based on appropriate engineering, economic, environmental, cultural, and social factors.

Major components of the selected plan include raising the height of approximately 2,300 linear feet of existing levees and 1,700 linear feet of existing floodwalls by approximately 2 feet, 230 linear feet of new floodwall, a new bulkhead closure gate to replace the existing panel closure at Mississippi Drive, a new overhead closure gate to replace an existing floodgate at 2nd Street, a new swing gate to replace the panel closure across the abandoned railroad just upstream on 2nd Street, and installation of a new closure structure across the railroad south of Washington Street.

The selected plan also includes improving a section of the Mad Creek channel upstream of 2nd Street to reduce flood stages and installing an enhanced flood warning system. The project cost estimate is \$3.45 million and the estimated benefit-cost ratio is 3.4 to 1.



Existing Panel Closure



US Army Corps
of Engineers®
Rock Island District

Des Moines and Raccoon River, Des Moines, Iowa Flood Damage Reduction Study

The study area is the City of Des Moines in Polk County, Iowa. Des Moines is located in central Iowa at the confluence of the Des Moines and Raccoon Rivers. In addition to the Des Moines and Raccoon Rivers, portions of several smaller tributaries, including Walnut Creek, Fourmile Creek, and 7th Ward Ditch, are contained within the City.



The Des Moines River above the confluence with the Raccoon River has a drainage area of 6,245 square miles, draining areas north of Des Moines in north-central Iowa and southwest Minnesota. Although Saylorville Dam and Reservoir largely regulate the Des Moines River, significant storm events such as in July 1993 cause flooding in areas throughout Des Moines. The Raccoon River enters the Des Moines River from the west near the Des Moines central business district and has a drainage area of 3,629 square miles.

The Raccoon River has no major flood control reservoirs and exhibits significant fluctuations in its flows.

The Red Rock Dam and Lake Red Rock project is located on the Des Moines River just downstream from the city of Des Moines.



The principal focus of study was to identify flood damage reduction opportunities within the City of Des Moines. The major findings in the reconnaissance study were:

- Existing levees are not adequate.
- The primary flooding threats in Des Moines are at the Des Moines Wastewater Treatment Plant and at the Birdland Park area along the Des Moines River.
- Updated hydraulic modeling is needed.
- There are opportunities for environmental restoration of wildlife and aquatic habitat.
- Structural alternatives for reducing flood damages in Des Moines are feasible and are likely to be economically justified.



US Army Corps
of Engineers®
Rock Island District

Lake Belle View, Belleville, Wisconsin

Section 206 Aquatic Ecosystem Restoration



John Frederick, the Village founder, constructed a dam in the Sugar River for powering a sawmill in 1845. Not far from that location, another dam was constructed in 1920 forming the present Lake Belle View. In 1926, the Village developed a 12-acre park on a peninsula extending toward the center of the lake. Since that time, the Village has grown around the lake, as have the communities of Montrose to the north and Exeter to the south.

Currently the lake has the typical water quality and fishery problems associated with aging artificial impoundments including sedimentation, turbidity, and lack of aquatic plant diversity, excessive nutrients, algal blooms, and rough fish. The Sugar River supports both cold- and warm-water fisheries, with several miles of cold-water fisheries upstream of Lake Belle View. Common carp populations in the lake are high and have increased upstream into the Sugar River.

Carp populations are not only a result of, but contribute to, the water quality problems in the lake through resuspension of bottom

sediments when scavenging. The river was once known for its smallmouth bass, which seems to have been diminished. The Wisconsin Department of Natural Resources states that the Belleville dam impedes fish passage. Therefore, the dam is potentially an impediment to maintaining the fishery downstream and contributing to reduced populations of smallmouth bass and other species upstream.

The view of the Village of Belleville can be seen in their commitment to find a solution to the problems that have been identified within Lake Belle View. In the early 1980's, the Village recognized the need to find solutions to problems in Lake Belle View. The Village formed a Lake Restoration Committee, which completed structural restoration efforts, including dam repair and riprap placement. They also authorized the University of Wisconsin Water Resources Management Workshop that completed a comprehensive report in 1995. In addition, the Village has passed a property tax exclusively for lake restoration and the town of Montrose has pledged funds to lake restoration efforts.

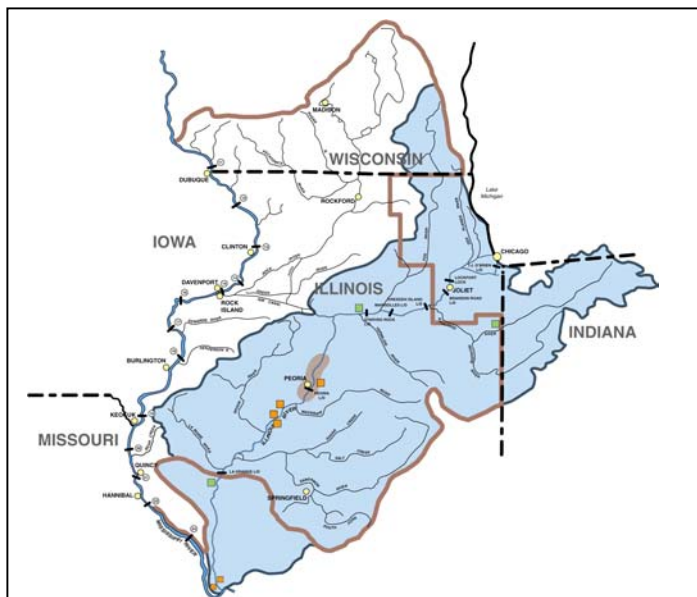
The goals proposed for this project:

- Improve water quality in both Lake Belle View and the Sugar River.
- Increase lake depths.
- Increase diversity of aquatic habitat.
- Improve diversity and quality of wetland habitat.



US Army Corps
of Engineers®
Rock Island District

Illinois River Ecosystem Restoration General Investigation



The study area encompasses the entire Illinois River Watershed. The study will identify the Federal and State interest in addressing problems related to the loss of backwaters and side channels due to sedimentation, destabilized tributary streams, changed hydrologic regimes and water fluctuations, and other impacts on the system caused by human activity.

For simplicity, the tasks are best viewed in major groupings. There are generally two types of efforts: (1) system evaluations focused on assessing the overall watershed needs and general locations for restoration, and (2) site-specific evaluations focused on developing detailed restoration options for possible implementation at specific sites. A final grouping of tasks relates to report preparation and processing.

The system and site-specific evaluations will investigate restoration opportunities falling into four focus areas:

1. Watershed Stabilization - Address tributary alterations and land uses, conservation easements, wetlands, water retention, riparian filter strips, and stream restoration.
2. Side Channel and Backwater Modification - Consider opportunities to restore habitats in these areas, including off-channel deep water habitat, backwater lakes, side channels, constructing islands, etc., acquisition or conservation easements of some flood plain lands.
3. Water Level Management - Evaluate options to reduce rapid fluctuations and naturalize flows.
4. Flood Plain Restoration and Protection - Evaluate flood plain use, potential restoration of flood plain function, and value/potential for use of Conservation Reserve Enhancement Program (CREP).

The system evaluations of these four areas will begin shortly after the study is initiated. Then, as the system needs and the most promising project locations are identified, efforts will begin on the site-specific evaluations. Due to cost and time limitations, only two to three specific sites will be developed in detail during the study. If greater system needs were identified, then a larger list of potential improvements would be prepared and recommended for authorization based on a lesser level of detail.

Section 8	Additional Missions
---------------------	----------------------------

Additional Missions



**US Army Corps
of Engineers®**
Rock Island District

In addition to our civil works mission, the Corps has been involved in improving recreation and commercial navigation, reducing flood damage and controlling beach erosion. Along with these missions, the Corps generates hydropower, supplies water to cities and industry, regulates development in navigable waters, and manages a recreation program. The additional mission areas of the Corps are Navigation, Regulation, Land Management, Other Engineering Services, and Recreation.

Navigation

Supporting navigation by maintaining and improving channels was the Corps of Engineers' earliest civil works mission, dating to Federal laws in 1824 authorizing the Corps to improve safety on the Ohio and Mississippi Rivers and several ports. Maintaining channels means keeping them at specified depths and widths by dredging and other means. Maintaining also means removing impediments, like logjams, and improving means making them deeper or wider.

The Rock Island District is responsible for maintaining a 9-foot navigation channel for 314 miles of the Mississippi River and 268 miles on Illinois River. We also operate and maintain 20 lock and dam structures on the two rivers. We operate 8 locks on the Illinois River and 14 locks at 12 sites on the Mississippi River.

Regulation

The Corps has been involved in regulating activities by others in navigable waterways through the granting of permits since passage of the River and Harbor Act of 1899. At first, this program was meant to prevent obstructions to navigation, although an early 20th century law gave us regulatory authority over the dumping of trash and sewage. Passage of the Clean Water Act in 1972 greatly broadened this role by giving the Corps authority over dredging and filling in the "waters of the United States," including many wetlands.

A major aspect of the Regulatory program is determining which areas qualify for protection as wetlands. In reaching these decisions, the Corps uses its 1987 Wetland Delineation Manual (available in pdf format).

In making decisions on whether to grant, deny, or set conditions on permits, district commanders are required to consider "all factors in the public interest," including economic development and environmental protection.

Numerous relatively minor activities in wetlands are covered by regional or nationwide general permits, allowing the regulatory staff to concentrate on cases that are more complex. Of the approximately 1,100 people who carry out this mission, about 70 percent have academic backgrounds in biology and environmental sciences.

As the lead Corps district for regulatory matters in Iowa and Illinois, we review more than 1,800 permits requests a year for the construction of structures and facilities, and discharge of dredged material fill in wetlands and navigable waterways.

Land Management

The Rock Island District manages Federal lands acquired by the Government through the construction of the navigation channel and flood control projects. Through our land management mission, we manage 197,000 acres of Federal land as a service to the public. We lease about 70 percent of this land to other agencies, primary for use as wildlife refuges. We also regulate and manage hundreds of cottage sites and residential leases located on the remaining Federal lands along the Mississippi River.

Other Engineering Services

In addition to military and civil works programs, the Corps provides engineering support to 60 non-Department of Defense Federal agencies, States, and local governments under the Interagency and International Support program. The types of support we provide include toxic waste cleanup for the Environmental Protection Agency's "Superfund" program, construction support for the Nation's space program, and facilities for the Drug Enforcement Agency and the Immigration and Naturalization Service.

Our land management mission also provides us the opportunity to support the Army and other defense agencies by allowing them the use of our Federal lands for training exercises. We also support the Army and other defense agencies through our military programs mission.

We have provided engineering, construction, and contract support services to the Corps' Louisville District, Rock Island Arsenal, and the 88th Regional Support Command. A wide range of projects has been designed by our architects and engineers.

The Rock Island District is also allowed to carry out cost-reimbursable work for other Federal and State agencies. Projects include:

- Flood insurance studies and water supply studies following natural disasters for FEMA.
- Hydropower review of plans for Federal Energy Regulatory Commission.
- Inspection of low-income housing for Housing and Urban Development.
- Wetland easement layout for the U.S. Department of Agriculture.
- Flood damage repairs for the U.S. Fish and wildlife Service.

Recreation

The Corps is the Nation's largest provider of outdoor recreation, operating more than 2,500 recreation areas at 463 projects (mostly lakes) and leasing an additional 1,800 sites to State or local park and recreation authorities or private interests. The Corps hosts about 360 million visits a year at its lakes, beaches, and other areas, and estimates that 25 million Americans (one in ten) visit a Corps project at least once a year. Supporting visitors to these recreation areas generates 600,000 jobs. For many citizens, the rangers at the recreation sites will represent their only contact with the Department of the Army.

The Rock Island District provides recreational opportunities to the public. We offer the largest recreational facilities and services in Iowa at our three reservoirs, in addition to a multitude (25) of facilities along our reaches of the Mississippi River.

The District operates five visitor centers, one on the Mississippi at Lock and Dam 15, one on Illinois River at Starved Rock Lock and Dam, and one each at Coralville, Saylorville, and Red Rock reservoirs.